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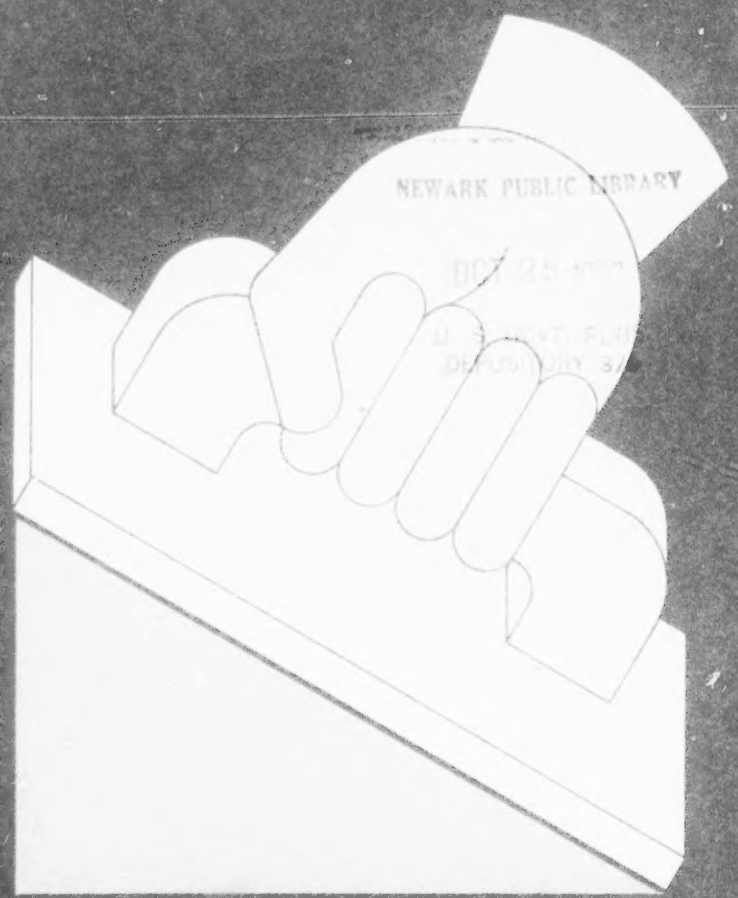
National Apprenticeship Standards for Cement Masonry, Asphalt, and Composition Trade

U.S. Department of Labor
Employment and Training Administration



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National Apprenticeship Standards for Cement Masonry, Asphalt, and Composition Trade

U.S. Department of Labor
Raymond J. Donovan, Secretary
Employment and Training Administration
Albert Angrisani
Assistant Secretary for Employment and Training
Bureau of Apprenticeship and Training
Revised 1982

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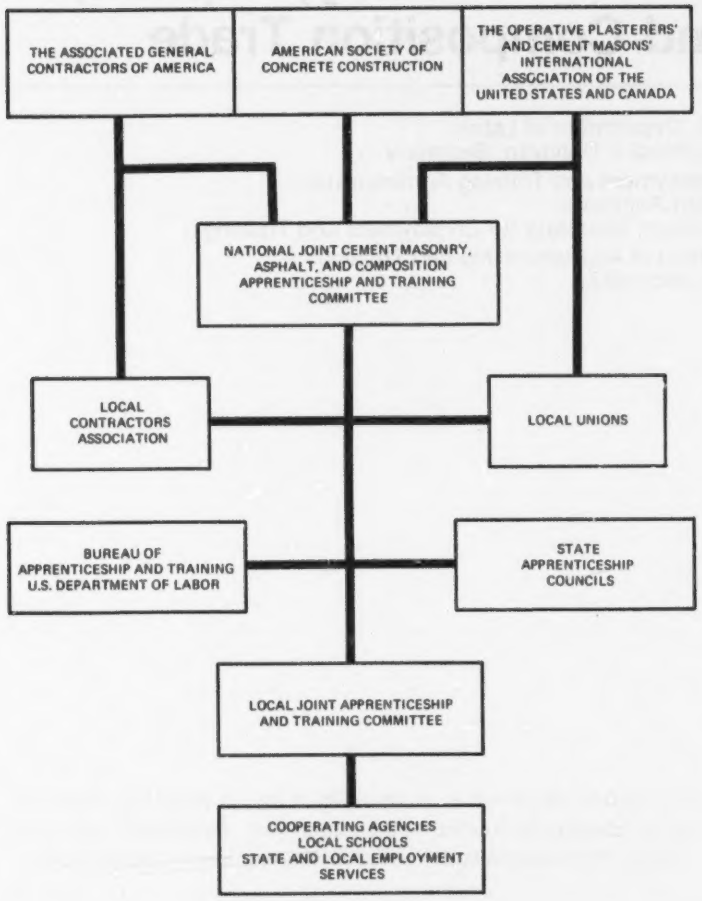
THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA
AMERICAN SOCIETY OF CONCRETE CONSTRUCTION
THE OPERATIVE PLASTERERS' AND CEMENT MASONS' INTERNATIONAL ASSOCIATION OF THE UNITED STATES AND CANADA
NATIONAL JOINT CEMENT MASONRY, ASPHALT, AND COMPOSITION APPRENTICESHIP AND TRAINING COMMITTEE
LOCAL CONTRACTORS ASSOCIATION
LOCAL UNIONS
BUREAU OF APPRENTICESHIP AND TRAINING U.S. DEPARTMENT OF LABOR
STATE APPRENTICESHIP COUNCILS
LOCAL JOINT APPRENTICESHIP AND TRAINING COMMITTEE
COOPERATING AGENCIES
LOCAL SCHOOLS
STATE AND LOCAL EMPLOYMENT SERVICES

PREFACE

The cement masonry, asphalt, and composition trade, through long practical experience and the skill and versatility of its craft workers, has developed high standards of accomplishment. To maintain this quality, contractors and unions alike recognize the importance of a sound, uniform, and comprehensive program of apprentice training.

Out of this mutual interest, the National Joint Cement Masonry, Asphalt, and Composition Apprenticeship and Training Committee was established to formulate national standards of apprenticeship. This committee is composed of an equal number of representatives of the Associated General Contractors of America, the Operative Plasterers' and Cement Masons' International Association (OP&CMIA) of the United States and Canada, and the American Society of Concrete Construction. It is a permanent committee which functions as an advisory and policy-making body in the interest of stimulating apprenticeship activity and promoting uniformity of training practices throughout the United States.

The national standards of apprenticeship set forth on the following pages were formulated with the assistance of the Bureau of Apprenticeship and Training. They encompass the fundamental requirements for effective apprenticeship programs and outline the training methods and practices which have proved to be most successful in training cement mason apprentices.

It is hoped that contractors and labor representatives in every locality will make full use of these up-to-date national standards as a guide in establishing local committees and areawide apprenticeship programs. The success and expansion of the national apprenticeship and training program will depend largely upon the initiative and cooperation of participating groups and individuals.

Detailed information on procedures for instituting a training program for cement masons may be obtained from the Associated General Contractors of America, the Operative Plasterers' and Cement Masons' International Association of the United States and Canada, the American Society of Concrete Construction, State apprenticeship agencies, or the Bureau of Apprenticeship and Training, U.S. Department of Labor.

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PROVISIONS OF STANDARDS

1. Definitions

Cement mason apprentice shall mean a person:

a. Who is at least 17 years of age;
b. Who is engaged in learning a trade covered by these standards; and
c. Who is covered by a written agreement (herein called an "apprenticeship agreement") with the local joint apprenticeship and training committee, acting as agent of the employer and employees, or by an agreement with the employer.

Registration agency shall mean a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training; or, if no such recognized agency exists in the State, it shall mean the Bureau of Apprenticeship and Training, U.S. Department of Labor.[1]

2. The Local Joint Committee

The local joint apprenticeship and training committee shall be composed equally of two or more members representing employers and two or more members representing employees. Members shall be selected by the groups they represent. The committee shall select, from its members, a chairperson and a secretary who shall retain voting privileges. In the event of a tie vote, the committee may select an impartial person to sit on the committee and, after a full and fair hearing, cast the deciding vote. The committee shall meet once each month or on call of the chairperson.

Consultants, such as those from the apprenticeship agencies and vocational schools, may be requested to sit with the joint committee in an advisory capacity.

The local joint committee shall exercise control over all apprentice training matters within its jurisdiction. Committees are urged, however, to cooperate and exchange information with other local committees in the interest of establishing uniformity of cement mason apprenticeship programs.

[1] Local application of these national standards in States having recognized apprenticeship councils may require adaptation to meet the standards of apprenticeship in such States. The staffs of the Bureau of Apprenticeship and Training and the State apprenticeship agencies are available to advise on such standards.

Where local unions refuse or neglect to provide for the training or placing of registered apprentices, the General Executive Board of the OP&CMIA may authorize provision for such training and/or placing and, further, authorize the transfer of registered apprentices into areas where none are available or where the local union refuses to accept transfers without sufficient cause.

3. Duties of the Local Joint Committee

The local joint apprenticeship and training committee shall prepare local apprenticeship standards and establish an apprenticeship and training system in conformity with the basic recommended standards of the Bureau of Apprenticeship and Training, and the National Apprenticeship and Training Standards for the Cement Masonry, Asphalt, and Composition Trade. The local committee shall also regulate, supervise, and control all matters relating to apprenticeship and training for cement masons within the jurisdiction of the sponsoring groups. Copies of local registered standards should be submitted to the National Joint Apprenticeship and Training Committee and, where applicable, to the International Union and the Associated General Contractors of America after final approval by the local contractors and union.

Specifically, the committee shall:

a. Determine the need for new apprentices within its jurisdiction, with due consideration to present and future employment needs of the trade, and the number of employers who can provide training consistent with the requirements of the system.
b. Establish minimum standards of education and experience required of apprenticeship applicants.
c. Receive and pass on all applications for apprenticeship and maintain a record of the action taken on each application.
d. Require that each apprentice be covered by a written agreement, preferably with the joint committee.
e. Examine the records of all apprentices and maintain a complete roster of such apprentices.
f. Require the apprentice to appear before the committee, at such times as it may elect, for examination as to progress in school, diligence in work, and ability to learn. The committee may advance any apprentice who shows outstanding ability by placing the apprentice in an advanced wage and training period.

g. Provide for a period of probation during which the apprentice's aptitude for the trade will be determined by the committee.
h. Register each apprentice with the appropriate registration agency.
i. Inform contractors engaged in federally financed construction projects that under Federal regulations, apprentices employed on such projects must be bona fide apprentices, duly indentured to and being trained under registered apprenticeship and training programs. (See Federal Laws and Regulations Affecting the Employment of Apprentices.)
j. Consult and cooperate with public and private agencies interested in apprenticeship and education.
k. Publicize the apprenticeship program in order to gain public interest and support.
l. Arrange for related instruction for apprentices in cooperation with the local board of education.
m. Determine the quality and quantity of training and on-the-job experience which apprentices must have, and be reasonably responsible for their meeting these requirements.
n. Assure that apprentices are receiving the required related technical instruction and diversified on-the-job training.
o. Determine that participating employers have the facilities to provide training consistent with the requirements of the program.
p. Conduct final examination of apprentices to establish their status as journeymen in the trade.
q. Prepare and submit all reports concerning its apprenticeship program that may be required by local, State, or Federal agencies, the National Committee, and the respective national organizations.
r. Notify the appropriate registration agency of all changes in status, terminations, and cancellations of apprenticeship agreements.
s. Supervise the enforcement of all provisions of the standards.

4. Qualifications for Apprenticeship

Applicants for apprentice training shall be at least 17 years of age. (Local joint apprenticeship committees shall have the authority to give special consideration to eligible veterans and to other

special cases.) Applicants must be physically able to do the work required of the trade and meet such other entrance qualifications as may be established by the local joint committee. Preemployment physical examination of each applicant may be required. The local programs shall state specifically the minimum qualifications for apprenticeship and exceptions to same.

The recruitment, selection, employment, and training of apprentices during their apprenticeship shall be without discrimination because of race, color, religion, national origin, or sex. The sponsor will take affirmative action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required under title 29 of the Code of Feceral Regulations (CFR), part 30, as amended.

All programs of apprenticeship registered with the Bureau of Apprenticeship and Training on and after January 17, 1964, must include acceptable apprentice selection standards and procedures and a nondiscrimination pledge consistent with the regulation.

In addition, each local joint apprenticeship committee will be required to develop and adopt an affirmative action plan, which must include goals and timetables, where applicable, in accordance with the requirements of title 29, CFR, part 30, as amended.

5. Term of Apprenticeship and Related Instruction

No applicant for membership as a journeyman under one of the full primary classifications shall be initiated into any local union unless and until the applicant has completed a term of apprenticeship in the trade. Apprentices must serve 2 years (not less than 4,000 hours) of on-the-job training and related instruction, exclusive of overtime hours on the job.

6. Apprenticeship Agreement[2]

Each apprentice shall be covered by a written apprenticeship agreement with the local joint committee, acting as agent of the employer, or an agreement between the apprentice and the employer and approved by the local joint committee. All apprentices shall be registered with the appropriate registration agency.

Each apprenticeship agreement shall contain a statement making the terms and conditions of the local apprenticeship standards a part of the agreement. For this reason, every appren-

[2] Some State apprenticeship agencies require the use of their own apprenticeship agreement forms. In such instances, the agreement forms may be obtained from the staff of the State agency or the Bureau of Apprenticeship and Training.

tice and employer will be required to read the local standards before signing the agreement.

7. Ratio of Apprentices to Journeymen

The ratio of apprentices to journeymen shall be established by the local joint apprenticeship committee, based on surveys of work opportunities and the availability of skilled craft workers. These surveys should take into consideration such factors as expected increase or decrease in construction volume; loss to the trade through death, retirement, etc.; and effects of technological change. The local program shall state the ratio of apprentices to journeymen. (The National Committee suggests a ratio of 1 apprentice per 5 journeymen.)

8. Apprentice Wages

A wage schedule for apprentices shall be included in the local standards and shall be established on the basis of a progressive percentage of the journeyman cement mason's wage rate. Preferably, the apprentice wage rate will advance at 6-month intervals.

9. Credit for Previous Experience

Apprenticeship applicants who have had previous experience in the trade or who have had related instruction may be granted advanced standing on the basis of demonstrated ability and knowledge. When the local committee grants advanced standing to the apprentice, the apprentice shall be paid the rate of the new period.

10. Coordinator of Apprentices

Local joint committees should give consideration to employing a full-time apprentice coordinator to administer the local program. Experience has proved the need for and value of a coordinator if maximum benefits are to be derived from the program.

11. Employer Responsibilitiy to Apprentices

The employer shall be responsible for the training of apprentices. With the advice and assistance of the local joint committee, the employer shall be responsible for the apprentices' work experience on the job, and the recording of same on record forms provided for that purpose.

12. Responsibilities of Apprentices

The local joint apprenticeship committee shall impress upon all apprentices that by signing the apprenticeship agreement they have voluntarily agreed to abide by the provisions of the local standards. The local committee shall further inform the apprentices of their responsibilities and obligations as follows:

a. To perform diligently and faithfully the work of the trade and other pertinent duties as assigned by the employer in accordance with the provisions of the local standards.
b. To respect and protect the property and equipment of the employer and abide by the working rules and regulations of the employer and the local joint committee.
c. To attend regularly and complete satisfactorily the required hours of instruction in subjects related to the trade, as provided under the local standards.
d. To maintain such records of work experience and training as may be required by the local joint committee.
e. To develop safe working habits and conduct themselves in such manner as to assure their own safety and that of their coworkers.
f. To work for the employer to whom the individual is assigned.
g. To conduct themselves at all times in a creditable, ethical, and moral manner, realizing that much time, money, and effort are being spent to afford them an opportunity to become skilled craft workers.

13. Hours of Work for Apprentices

The working conditions for apprentices shall be the same as those for journeymen in the trade and shall be in conformity with State and Federal laws. Apprentices shall not be allowed to work overtime if it interferes with their attendance at related instruction classes.

14. Accident Prevention

Apprentices shall be advised of the great need for preventing accidents and shall be given instruction in safe construction methods. Apprentices shall also be advised of their rights and responsibilities for safe working conditions under the Federal Occupational Safety and Health Act and similar State laws. Apprentices should be taught that accident prevention is largely a matter of

education, vigilance, and cooperation, and that they should strive at all times to conduct themselves and handle their work in such a manner as to insure their safety and that of their coworkers.

15. Adjusting Differences

In cases of dispute between the employer and the apprentice, either party has the right and privilege of appeal to the local joint committee for action and adjustment of such matters as come within these standards. The local committee shall hear all parties and make such adjustments as it may consider necessary.

16. Certificate of Completion

Immediately after apprentices pass their journeyman examinations, they shall be furnished with a certificate attesting to the satisfactory completion of the apprenticeship and their status as journeymen. Certificates of completion are available from the registration agency upon request by the local joint committee.

JOINT TRAINING FUNDS

1. Legality of Training Funds

Training funds for use in defraying the cost of apprenticeship or other training programs to which employers contribute are authorized under the Labor-Management Reporting and Disclosure Act of 1959, which amends section 302 of the Labor-Management Relations Act of 1947. Such funds must be established in the form of a trust; the trustees must be equally representative of employers and employees (this may be the joint apprenticeship committee); and the basis on which payments to the trust are to be made must be detailed in written agreement with the employer, including provision for an annual audit of the trust. Those persons (trustees) responsible for the custody or control of the trust funds must be bonded.

Where a trust is established, a clause should be included in the trust agreement stating (1) that the trusteeship is a nonprofit organization; (2) that no part of the net earnings will inure to any private individual or member; and (3) how the accrued moneys and other assets will be disposed in the event of dissolution of the trust. (They can be apportioned to those who paid into the fund, or donated to a charitable or educational organization or to the labor organization.)

2. Tax-Exempt Status of the Trust

Training trust funds are considered to be tax-exempt by the Internal Revenue Service under section 501(c)5 of the Internal Revenue Code of 1954. To obtain this exemption, the trustees must file Form 1024 with the appropriate district director of Internal Revenue. In submitting Form 1024, include with it a copy of the trust agreement and apprenticeship program. After the tax-exempt status of the trust has been determined, each year thereafter the trustees shall make a return on Form 990 in order to maintain this exemption.

Employer contributions to the training trust fund are deductible as ordinary and necessary expenses in the conduct of their business under section 162(a) of the Internal Revenue Code.

FEDERAL LAWS AND REGULATIONS AFFECTING THE EMPLOYMENT OF APPRENTICES

Wage and Hour Regulations (Ruling Concerning Payment for Time Spent by Apprentices in Related Instruction).—The Fair Labor Standards Act requires that each employee not specifically exempted, who is engaged in interstate commerce or in the production of goods for such commerce, receive the statutory minimum wage; and that no employee (including an apprentice) may be employed for more than 40 hours a week without receiving at least time and one-half of the employee's regular rate of pay for the overtime hours.

As an enforcement policy, time spent in an organized program or related supplemental instruction by apprentices working under bona fide apprenticeship programs may be excluded from working time if the following criteria are met: (1) The apprentice is employed under a written apprenticeship agreement or program which substantially meets the basic standards of the Bureau of Apprenticeship and Training, U.S. Department of Labor; and (2) such time does not involve production work or performance of the apprentice's regular duties. If the above criteria are met, the time spent in such related supplemental training shall not be counted as hours worked unless the written agreement specifically provides that it is hours worked. The mere payment or agreement to pay for time spent in related instruction does not constitute an agreement that such time is hours worked.

Equal Employment Opportunity Legislation and Regulations.—The Civil Rights Act of 1964, title VII, prohibits discrimination in all phases of employment, including apprenticeship, because of race, color, religion, sex, or national origin. It applies to employers; employment agencies; labor organizations; joint apprenticeship committees; and, under the 1972 amendments, Federal agencies.

Detailed information regarding application of title VII of the Civil Rights Act may be obtained from the regional offices of the Equal Employment Opportunity Commission.

Information on title 29, Code of Federal Regulations, part 30, as amended, may be obtained from the Bureau of Apprenticeship and Training, U.S. Department of Labor, or State apprenticeship agencies.

NOTE: It is suggested that all local joint committees contact their State agencies for applicable laws affecting apprenticeship, with special attention to latest revisions.

Wage Determination Regulations (Federally Financed and Assisted Construction).—The Secretary of Labor, through the Office of the Wage and Hour Administrator of the U.S. Department of Labor, predetermines the prevailing wages for construction mechanics and laborers employed on Federal or federally assisted construction projects. (Details of these regulations will be found in part 1 and part 5, title 29, subtitle A, Code of Federal Regulations, covering labor standards provisions applicable to public contracts.)

Local joint apprenticeship committees should advise all contractors participating in the local apprenticeship program that, in case they are awarded a contract for a federally financed or assisted construction project, their apprentices must be employed under a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Buerau of Apprenticeship and Training, U.S. Department of Labor; or, if no such recognized agency exists in the State, with the Bureau of Apprenticeship and Training, U.S. Department of Labor. Participating contractors shall further be advised that apprentices so employed must be individually registered with the appropriate registration agency.

The contratcor must present written evidence of such registration, including evidence of the established ratios and wage rates applicable in the project area, to the contracting officer for acceptance.

Veterans Readjustment Legislation (Public Law 90-77, 90th Congress).—A veteran of at least 181 days of continuous active duty, any part of which occurred after January 31, 1955, or a veteran who was released from active duty after January 31, 1955, for a service-connected disability, is eligible to pursue on a full-time basis an approved program of apprenticeship and receive a monthly training assistance allowance.

The apprenticeship program must meet the standards of the Bureau of Apprenticeship and Training, U.S. Department of Labor, and be approved by the appropriate State veterans approving agency.

Under the provisions of the veterans readjustment legislation, joint apprenticeship committees may be recognized as training establishments.

APPENDIX A
WORK EXPERIENCE AND TRAINING

Work-Experience Schedule

This schedule is an example of the type of on-the-job training considered necessary to develop a skilled worker in the cement masonry trade. It may be adapted to local conditions within the limits of basic knowledge required of the trade. Following are the major divisions of the trade:

	Hours	*Years*
Fundamentals	2,000	1
Advanced Fundamentals and Specialties	2,000	1
	4,000	2

1. First Year (2,000 Hours)—Fundamentals

a. Setting screeds to line
b. Tamping and rodding of concrete
c. Use of float and trowel
d. Use of edgers and jointers
e. Chipping of concrete
f. Patching of concrete
g. Rubbing and brushing of concrete
h. Establishing grade lines and heights
i. Setting expansion joints
j. Setting curb and gutter screeds
k. Finishing of curbs, gutters, sidewalks, driveways, garage and basement floors, and wash paves
l. Setting screeds for floors where topcoating is used
m. Finishing of foundations, walls, and ceilings (patching, rubbing, and brushing)
n. Application of driers and/or operation of vacuum mats
o. Use of machines
p. Safety

2. Second Year (2,000 Hours)—Advanced Fundamentals and Specialties

a. Layout of joints in special designs (square, diagonal, etc.)
b. Forming valleys and summits

c. Layout of risers and treads
d. Pouring and finishing steps plan, or with nosing or overhang
e. Base, plain and coved, flush and projecting
f. Bush hammering and acid wash of concrete
g. Pointing around steel sash encased in concrete
h. Copings, porches, patios, etc.
i. Window sills, thresholds, plinth blocks, etc.
j. Heavy duty floors
k. Use of colors
l. Magnesite and composition installations
m. Asphalt and mastic installations
n. Gunite
o. Waterproofing
p. Renovation of concrete
q. Architectural and ornamental concrete
r. Safety

Related Classroom Instruction Schedule for Cement Mason Apprentices

The material included in this course is of such a nature that it will provide the technical knowledge and trade information necessary for the advancement of the apprentice in the trade. Safety instruction should be included in the course, with stress on personal health and protection against occupational hazards and diseases.

1. First Year (144 Hours)

a. Related mathematics
   (1) Arithmetical processes
   (2) Lines, angles, areas, and volumes
   (3) Fractions, decimals, ratio, and proportion
   (4) Weights and measures
   (5) Mathematics used in cement masonry work
b. Plan reading and freehand sketching
   (1) Blueprint reading and sketching
   (2) Freehand sketching
c. Estimating
   (1) Estimating from construction plans
   (2) Determining quantities
d. Related science
   (1) Physical and chemical properties of materials

(2) Characteristics of materials
  (a) Sand
  (b) Stone
  (c) Cement
    (1) tilt-up
    (2) pre-stress
  (d) Concrete mortars
  (e) Plaster
  (f) Lime
  (g) Colors and pigments
  (h) Cutting and grinding machines
  (i) Waterproofing compounds
  (j) Accelerators and retarders
  (k) Chlorides

e. Trade theory
  (1) Layout and construction
  (2) Pointing and calking
  (3) Waterproofing
  (4) Use of composition

f. Industry history
  (1) History and principles of successful industrial and labor relations
  (2) Citizenship

g. Safety and hygiene

2. Second Year (144 Hours)

a. Related mathematics
  (1) Review of fundamentals
    (a) Calculation of areas and volumes
    (b) Solution of formulas and equations
  (2) Mathematics used in cement masonry work

b. Architectural drawing
  (1) Use of drawing instruments
  (2) Lettering standards
  (3) Simple geometric construction
  (4) Projection
  (5) Freehand sketching
  (6) Plan views and elevations

c. Estimating
  (1) Review of fundamentals
    (a) Estimating from construction drawings
    (b) Determining quantities
  (2) Preparing buying specifications

(3) Preparing bids

d. Building codes and legislation
   (1) State, city, and other building codes
   (2) Labor legislation

e. Trade practice
   (1) Layout and construction
   (2) Construction of bases, steps, and corners
   (3) Preparation of special cement mixtures
   (4) Mixing waterproofing compounds

f. Films and visual aids

g. Safety and hygiene

Third Year (Optional)—Work Experience and Related Classroom Instruction

The third year of apprenticeship training is optional, depending on local autonomy, and therefore will emphasize supervisor training.

1. On-the-job Supervisor Training (2,000 Hours)

a. Establishing grade lines and heights
b. Setting screeds to line
c. Setting expansion joints
d. Setting curb and gutter screeds
e. Finishing of curbs, gutters, sidewalks, driveways, garages, basement floors, and wash paves.
f. Finishing of foundations, walls, ceilings (patching, rubbing, and brushing)
g. Use of machines
h. Layout of joints in special designs (square, diagonal, etc.)
i. Use of colors
j. Architectural and ornamental concrete
k. Blueprint reading
l. Estimating
m. Planning and scheduling
n. Surveying
o. Safety

2. Related Instruction (144 Hours)

a. Related mathematics
   (1) Calculation of areas and volumes
   (2) Solution of formulas and equations

b. Surveying and blueprint reading
   (1) Surveying of construction
   (2) Layout of construction lines
   (3) Blueprint reading and sketching
c. Estimating
   (1) Estimating from construction drawings
   (2) Determining quantities
   (3) Preparing buying specifications
   (4) Preparing bids
d. Materials for concrete
   (1) Cement
   (2) Aggregates
   (3) Water
e. Principles of quality concrete
   (1) Placing and consolidating concrete
   (2) Jointing and crack control
   (3) Hot- and cold-weather concreting
   (4) Finishing and curing concrete flatwork
f. Decorative concrete
   (1) Architectural and ornamental concrete
   (2) Exposed aggregate finishes
   (3) Bushhammering
   (4) Colored concrete
g. Leadership training
   (1) Job costs and their importance
   (2) Human relations in supervision
   (3) Equipment maintenance
   (4) Public relations
h. Communication skills
i. Films and visual aids
j. Safety and hygiene

APPENDIX B
SOURCES OF RELATED INSTRUCTION MATERIALS

Related instruction for apprentices should be taught by persons who are thoroughly competent in the theory, practices, and skills of the cement masonry trade, and who recognize the value of good teaching techniques.

The local joint apprenticeship and training committee should consult local public vocational school authorities for assistance in locating suitable text material and teaching aids to fit local needs.

The U.S. Department of Health, Education, and Welfare, Office of Education, Division of Technical and Vocational Education, Service Branch, Curriculum Program Section, Washington, D.C. 20202, periodically publishes a price list of cement masonry instruction materials available from public education agencies in the various States, copies of which are available without charge, upon request. Requests for information concerning the availability of the materials listed in this publication should be made to the office of the superintendent of public schools in the cities concerned.

School authorities frequently can offer information concerning the adaptability of commercially published textbooks to local apprentice training programs.

APPENDIX C
APPRENTICESHIP RECORDKEEPING [3]

It is essential that a current, accurate, and complete record be kept of each apprentice, showing work progress, attendance at related instruction, and joint apprenticeship committee actions. A number of different types of recordkeeping systems are in use in different areas. Some systems include a variety of forms for daily, weekly, and monthly records, as well as a final master chart summarizing pertinent data recorded during the entire term of apprenticeship.

Reproduced at the end of this appendix is a sample form that the National Committee recommends for use by local joint apprenticeship committees so that a uniform system can be put into effect. Such a system will assure that information regarding an apprentice will be available to send from one area to another upon request.

The application for apprenticeship and the apprenticeship master record should be tied together by use of the social security number, thus furnishing a positive means of identification should the apprentice move to a different area and joint apprenticeship committee.

[3] Sample forms and recordkeeping systems may be obtained from the Associated General Contractors of America, the Operative Plasterers' and Cement Masons' International Association of the United States and Canada, the American Society of Concrete Construction, or the Bureau of Apprenticeship and Training, U.S. Department of Labor.

SAMPLE FORM
ON-THE-JOB RECORDKEEPING

CEMENT MASONRY TRADE—1st Year Apprenticeship: Job fundamentals, including safety instruction

APPRENTICE ADDRESS CITY

EMPLOYER ADDRESS CITY

Period Covered Signature: Title:

Beginning **Ending** (EMPLOYER OR FOREMAN VERIFY AND SIGN ABOVE)

Total hours required, 2,000	A	B	C	D	E	F	G	H				
	Setting screeds to line	Tamping and roddling of concrete	Use of float and trowel	Use of edgers and jointers	Chipping of concrete	Patching of concrete	Rubbing and brushing of concrete	Application of drier and/or operation of curing mats	On-job hours completed	On-job grade rating	Hours of related instruction	Related instruction grade rating
Hours brought forward												
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												
Sunday												
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												
Sunday												
Total hours												
Grand total												